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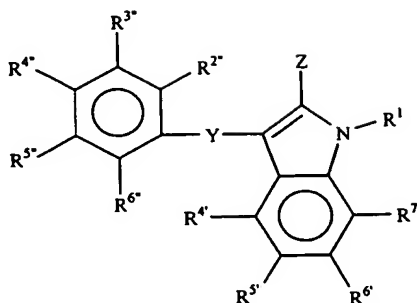
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WE CLAIM:

1. A compound of the formula (I):



or its pharmaceutically acceptable salt thereof, wherein

- (a) R^1 is hydrogen; acyl; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)OR^2$; $-C(=O)SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; $-C(=O)NH_2$; $-C(=W)NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH-(CH_2)_p$ -(amino acid) or $-(CH_2)_p$ -(amino acid);
- (b) R^4 , R^5 , R^6 , R^7 , $R^{2''}$, $R^{3''}$, $R^{4''}$, $R^{5''}$ and $R^{6''}$ are each independently H; halo (F, Cl, Br or I); $-NO_2$; $-CN$; $-OH$; $-OR^2$; $-SH$; $-SR^2$; $-NH_2$; $-NHR^2$; $-NR^2R^3$; $-NHSO_2-C_{1-3}alkyl$; $-NR^2SO_2-C_{1-3}alkyl$; $-NHCO-C_{1-3}alkyl$; $-NR^2CO-C_{1-3}alkyl$; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl (such as an optionally substituted or unsubstituted branched or unbranched $-C_{1-6}alkyl$, $-C_{2-6}alkenyl$ or $-C_{2-6}alkynyl$, and in particular $-CH_3$, CF_3 , vinyl bromide, $-CR^2R^2-S(O)_n-R^3$, $-CR^2R^2NH_2$, $-CR^2R^2NHR^2$, $-CR^2R^2NR^2R^3$ and $-CR^2R^2-C(=O)R^2$); alkacyl; optionally substituted or unsubstituted acyl; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)OR^2$; $-C(=O)-SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; $-C(=O)NH_2$; $-C(=W)NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)-NR^2R^3$; $-C(=W)NH(CH_2)_p$ -(amino acid), a residue of an amino acid or $-(CH_2)_p$ -(amino acid); wherein if R^5 is hydrogen, F, Cl, Br, $-NO_2$, $-CN$, $-OR^2$, $-NR^2R^2$, $-NHSO_2-C_{1-3}alkyl$ or $-NHCO-C_{1-3}alkyl$, then at least one of R^4 , R^6 and R^7 is not hydrogen or alternatively, wherein at least two of R^4 , R^5 , R^6 , R^7 are not hydrogen;

- (c) Z is optionally substituted or unsubstituted acyl, $-C(=O)NH_2$; $-C(=W)-NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH(CH_2)_p$ -(amino acid); a residue of an amino acid, $-(CH_2)_p$ -(amino acid); $-C(=O)R^3$; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OR^3$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)-OR^2$; $-C(=O)-SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl (such as an optionally substituted or unsubstituted branched or unbranched C_{1-6} alkyl, C_{2-6} alkenyl or C_{2-6} alkynyl, and in particular CH_3 , CF_3 , vinyl bromide, $-CR^2R^2-S(O)_n-R^3$, $-CR^2R^2NH_2$, $-CR^2R^2NHR^2$, $-CR^2R^2NR^2R^3$ and $-CR^2R^2-C(=O)R^2$); $-CN$, or halo (F, Cl, Br or I);
- (d) Y is O, S or $S(O)_n$;
- (e) each W is independently O, S, $-NH_2$, $-NHR^2$, $-NR^2R^2$, $-N-CN$, $-N-NH_2$, $-N-NHR^2$, $-N-NR^2R^3$, $-N-OH$ or $-N-OR^2$;
- (f) each R^2 is independently hydrogen or an optionally substituted or unsubstituted branched or unbranched lower alkyl, alkenyl or alkynyl (such as an optionally substituted or unsubstituted branched or unbranched C_{1-3} alkyl, C_{2-4} alkenyl or C_{2-4} alkynyl, and in particular CH_3 , CF_3 , vinyl bromide, $-CR^2R^2-S(O)_n-R^3$, $-CR^2R^2NH_2$, $-CR^2R^2NHR^2$, $-CR^2R^2NR^2R^3$ and $-CR^2R^2-C(=O)R^2$);
- (g) each R^3 is independently hydrogen; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl (such as an optionally substituted or unsubstituted branched or unbranched C_{1-6} alkyl, C_{2-6} alkenyl or C_{2-6} alkynyl, and in particular CH_3 , CF_3 , vinyl bromide, $-CR^2R^2-S(O)_n-R^3$, $-CR^2R^2NH_2$, $-CR^2R^2NHR^2$, $-CR^2R^2NR^2R^3$ and $-CR^2R^2-C(=O)R^2$); optionally substituted or unsubstituted aryl (such as phenyl); optionally substituted or unsubstituted heterocycle; optionally substituted or unsubstituted alkylaryl, optionally substituted or unsubstituted alkylheterocycle, optionally substituted or unsubstituted aralkyl, optionally substituted or unsubstituted heterocycle-alkyl;
- (h) each n is independently 0, 1 or 2;

- (i) each p is independently 0, 1, 2, 3, 4 or 5; and
- (j) wherein if one or more of the optionally substituted branched or unbranched alkyl, alkenyl, alkynyl, lower alkyl, lower alkenyl or lower alkynyl; acyl; aryl; heterocycle; alkaryl; alkheterocycle; arylalkyl or alkylheterocycle substituents is substituted, then preferably it is substituted with one or more of halogen (F, Cl, Br or I), -OH, -OR², -SH, -SR², oxime (defined herein as -CH=N-OH), hydrazine (defined herein as -NH-NH₂), -C(=O)H, -C(=W)H, -C(=O)R², -C(=W)R², -C(=O)OH, -C(=W)OH, -C(=O)OR², -C(=W)OR², -C(=O)SH, -C(=W)SH, -C(=O)SR², -C(=W)SR², -C(=O)NH₂, -C(=W)NH₂, -C(=O)-NHR², -C(=W)NHR², -C(=O)NR²R³, -C(=W)NR²R³, -NH₂, -NHR², -NR²R³, -NHSO₂-C₁₋₃alkyl, -NR²SO₂-C₁₋₃alkyl, -NHCO-C₁₋₃alkyl, -NR²CO-C₁₋₃alkyl, -S(O)_n-R³, C₁₋₃ alkoxy, C₁₋₃thioether, a residue of an amino acid such as -NH(CH₂)_p-(amino acid) or -C(=W)NH(CH₂)_p-(amino acid).
2. The compound of claim 1, wherein Y is SO₂.
 3. The compound of claim 1, wherein Z is an amide.
 4. The compound of claim 1, wherein R¹ is hydrogen.
 5. The compound of claim 1, wherein
 - (a) R¹ is hydrogen;
 - (b) R^{4'}, R^{5'}, R^{6'} and R^{7'} are independently hydrogen, halogen (F, Cl, Br or I), -NO₂, -CN, -OR², -NR²R², -NHSO₂-C₁₋₃alkyl, -NHCO-C₁₋₃alkyl, oxime, hydrazine, or C₁₋₃ alkyl or alkenyl optionally substituted with one or more of -OH, -SH, -C(O)H, -COOH, halogen (F, Cl, Br or I), -NR²R², -C₁₋₃ alkoxy or -C₁₋₃ thioether; wherein if R^{5'} is hydrogen, F, Cl, Br, -NO₂, -CN, -OR², -NR²R², -NHSO₂-C₁₋₃alkyl or -NHCO-C₁₋₃alkyl, then at least one of R^{4'}, R^{6'} and R^{7'} is not hydrogen;
 - (c) R^{2''}, R^{3''}, R^{4''}, R^{5''} and R^{6''} are independently hydrogen, halogen (F, Cl, Br or I), -NO₂, -CN, -OH, -OR², -NR²R², -NHSO₂-C₁₋₃alkyl, -NHCO-C₁₋₃alkyl, -C₁₋₅ alkoxy, oxime, hydrazine, -C₁₋₅ alkyl or alkenyl optionally substituted with one or more of -OH, -SH, -C(O)H, -COOH, halogen (F, Cl, Br or I), -NR²R², -C₁₋₅ thioether or -C₁₋₅ alkoxy;

- (d) Z is $-\text{CN}$, $-\text{C}(=\text{W})\text{NR}^2\text{R}^3$, $-\text{C}(=\text{O})\text{R}^3$, $-\text{C}(=\text{O})\text{OR}^3$, $-\text{CR}^2\text{R}^2-\text{S}(\text{O})_n-\text{R}^3$, $-\text{CR}^2\text{R}^2\text{NHR}^2$, $-\text{CR}^2\text{R}^2-\text{CO}-\text{R}^3$ or substituted or unsubstituted lower alkyl;
- (e) Y is O, S, or $\text{S}(\text{O})_n$;
- (f) each W is independently O, S, $-\text{N}-\text{CN}$ or $-\text{N}-\text{OR}^2$;
- (g) R^2 is hydrogen or C_{1-3} alkyl;
- (h) R^3 is hydrogen, substituted or unsubstituted alkyl, alkenyl, aryl, or heterocycle, $-\text{C}_{1-5}$ alkoxy, $-\text{OH}$, $-\text{NR}^2\text{R}^2$, or $-(\text{CH}_2)_p\text{C}(\text{O})\text{NR}^2\text{R}^2$,
- (i) each n is independently 0, 1 or 2; and
- (j) each p is independently 0, 1, 2, 3, 4, or 5.

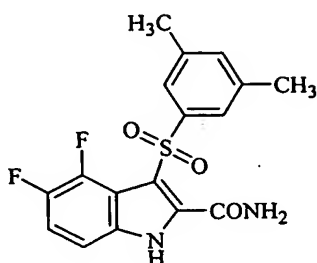
6. The compound of claim 1, wherein

- (a) R^1 is hydrogen;
- (b) $\text{R}^{4'}$, $\text{R}^{5'}$, $\text{R}^{6'}$, $\text{R}^{7'}$, are independently hydrogen, halogen (F, Cl, Br or I), $-\text{NO}_2$, $-\text{CN}$, $-\text{OR}^2$, $-\text{NR}^2\text{R}^2$, $-\text{NHSO}_2-\text{C}_{1-3}\text{alkyl}$, $-\text{NHCO}-\text{C}_{1-3}\text{alkyl}$, oxime (defined herein as $-\text{CH}=\text{N}-\text{OH}$), hydrazine (defined herein as $-\text{NH}-\text{NH}_2$), or C_{1-3} alkyl or alkenyl optionally substituted with one or more of $-\text{OH}$, $-\text{SH}$, $\text{C}(\text{O})\text{H}$, COOH , halogen, NR^2R^2 , C_{1-3} alkoxy, or C_{1-3} thioether; wherein if $\text{R}^{5'}$ is hydrogen, F, Cl, Br, $-\text{NO}_2$, $-\text{CN}$, $-\text{OR}^2$, $-\text{NR}^2\text{R}^2$, $-\text{NHSO}_2-\text{C}_{1-3}\text{alkyl}$ or $-\text{NHCO}-\text{C}_{1-3}\text{alkyl}$, then at least one of $\text{R}^{4'}$, $\text{R}^{6'}$ and $\text{R}^{7'}$ is not hydrogen;
- (c) $\text{R}^{2''}$, $\text{R}^{3''}$, $\text{R}^{4''}$, $\text{R}^{5''}$, and $\text{R}^{6''}$, are independently hydrogen, halogen (F, Cl, Br or I), $-\text{NO}_2$, $-\text{CN}$, $-\text{OR}^2$, $-\text{NHSO}_2-\text{C}_{1-3}\text{alkyl}$, $-\text{NHCO}-\text{C}_{1-3}\text{alkyl}$, oxime, hydrazine, $-\text{C}_{1-5}$ alkyl or alkenyl optionally substituted with one or more of $-\text{OH}$, $-\text{SH}$, $\text{C}(\text{O})\text{H}$, COOH , halogen, NR^2R^2 , C_{1-5} thioether, or C_{1-5} alkoxy, $-\text{C}_{1-5}$ alkoxy, $-\text{OH}$, or $-\text{NR}^2\text{R}^2$;
- (d) Z is $-\text{C}(\text{W})\text{NR}^2\text{R}^3$, or $-\text{COR}^3$;
- (e) Y is $-\text{S}(\text{O})_n-$ or $-\text{O}-$, in which n is 0, 1 or 2;
- (f) W is O, S, $-\text{N}-\text{CN}$ or $-\text{N}-\text{OR}^2$;
- (g) R^2 is hydrogen or C_{1-3} alkyl;
- (h) R^3 is C_{1-5} alkyl, C_{1-5} alkenyl, aryl, or heterocycle, substituted with one or more of $\text{C}(\text{O})\text{NR}^2\text{R}^2$, $-\text{NR}^2\text{R}^2$, $-(\text{CH}_2)_m\text{C}(\text{O})\text{NR}^2\text{R}^2$, $-(\text{CH}_2)_m\text{C}(=\text{W})-$

$\text{NH}(\text{CH}_2)_p\text{-(amino acid)}$;

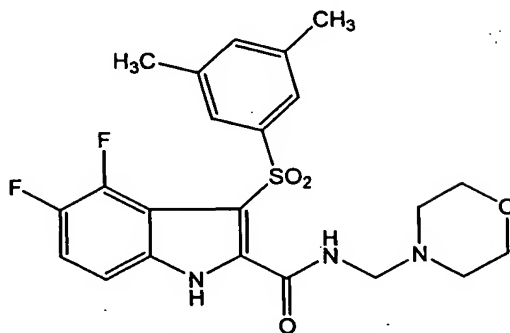
- (i) each n is independently 0, 1 or 2; and
- (j) each p is independently 0, 1, 2, 3, 4, or 5.

7. A compound of the formula



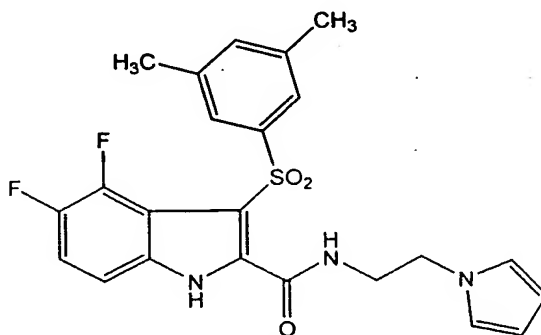
or a pharmaceutically acceptable salt thereof.

8. A compound of the formula



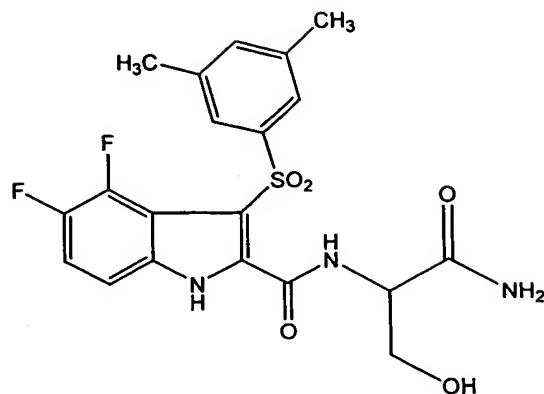
or a pharmaceutically acceptable salt thereof.

9. A compound of the formula



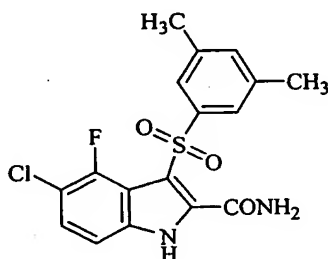
or a pharmaceutically acceptable salt thereof.

10. A compound of the formula



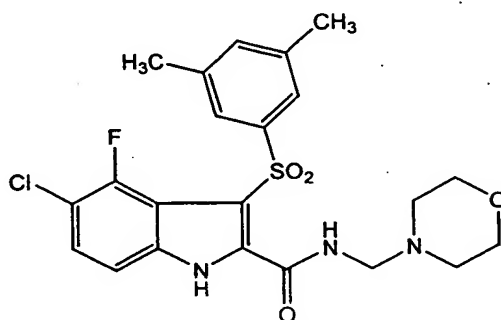
or a pharmaceutically acceptable salt thereof.

11. A compound of the formula



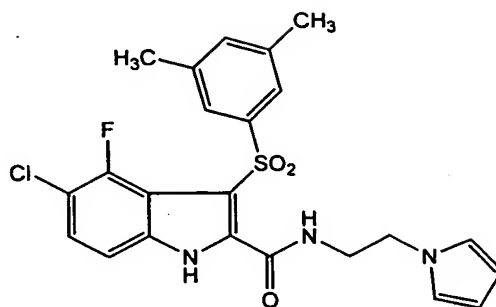
or a pharmaceutically acceptable salt thereof.

12. A compound of the formula



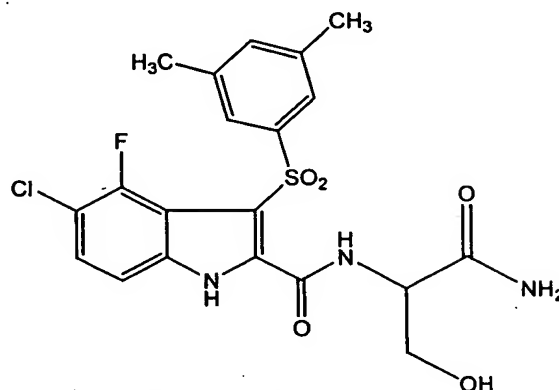
or a pharmaceutically acceptable salt thereof.

13. A compound of the formula



or a pharmaceutically acceptable salt thereof.

14. A compound of the formula



or a pharmaceutically acceptable salt thereof.

15. A pharmaceutical composition comprising an effective anti-HIV treatment amount of a compound of claim 1, or its pharmaceutically acceptable salt thereof, together with a pharmaceutically acceptable carrier or diluent.
16. A pharmaceutical composition comprising an effective anti-HIV treatment amount of a compound of claim 1, or its pharmaceutically acceptable salt thereof, in combination with one or more other anti-HIV agent, optionally with a pharmaceutically acceptable carrier or diluent.
17. The pharmaceutical composition of claim 16, wherein the other anti-HIV agent is a reverse transcriptase inhibitor.
18. The pharmaceutical composition of claim 17, wherein the reverse transcriptase inhibitor induces a mutation lysine 103 \rightarrow asparagine and/or tyrosine 181 \rightarrow cysteine in HIV reverse transcriptase.

19. A method for the treatment or prophylaxis of an HIV-infection in a host comprising administering to said host an effective anti-HIV treatment amount of a compound of claim 1, or its pharmaceutically acceptable salt thereof, optionally in a pharmaceutically acceptable carrier or diluent.
20. A method for the treatment or prophylaxis of an HIV-infection in a host comprising administering to said host an effective anti-HIV treatment amount of a compound of claim 1, or its pharmaceutically acceptable salt thereof, in combination and/or alternation with one or more other anti-HIV agent, optionally in a pharmaceutically acceptable carrier or diluent.
21. The method of claim 20, wherein the other anti-HIV agent is a reverse transcriptase inhibitor.
22. The method of claim 21, wherein the reverse transcriptase inhibitor induces a mutation lysine 103 → asparagine and/or tyrosine 181 → cysteine in HIV reverse transcriptase.
23. A method for the treatment or prophylaxis of an HIV-infection in a host, wherein the HIV has a mutation at lysine 103 → asparagine and/or tyrosine 181 → cysteine in HIV reverse transcriptase, comprising administering to said host an effective anti-HIV treatment amount of a compound of claim 1, or its pharmaceutically acceptable salt thereof, optionally in a pharmaceutically acceptable carrier or diluent.
24. A method for the treatment or prophylaxis of an HIV-infection in a host, wherein the HIV is resistant to one or more reverse transcriptase inhibitor(s), comprising administering to said host an effective anti-HIV treatment amount of a compound of claim 1, or its pharmaceutically acceptable salt thereof, in combination and/or alternation with one or more other anti-HIV agent, optionally in a pharmaceutically acceptable carrier or diluent.
25. A method for salvage therapy in the treatment or prophylaxis of an HIV-infection in a host, comprising administering to said host an effective anti-HIV treatment amount of a compound of claim 1, or its pharmaceutically acceptable salt thereof, optionally in a pharmaceutically acceptable carrier or diluent.

26. A method for salvage therapy in the treatment or prophylaxis of an HIV-infection in a host, comprising administering to said host an effective anti-HIV treatment amount of a compound of claim 1, or its pharmaceutically acceptable salt thereof, in combination and/or alternation with one or more other anti-HIV agent, optionally in a pharmaceutically acceptable carrier or diluent.
27. A method for the treatment or prophylaxis of an HIV-infection in a host, wherein the HIV is resistant to one or more reverse transcriptase inhibitor(s), comprising administering to said host an effective anti-HIV treatment amount of a compound of claim 1, or its pharmaceutically acceptable salt thereof, optionally in a pharmaceutically acceptable carrier or diluent.
28. A method for the treatment or prophylaxis of an HIV-infection in a host, wherein the HIV has a mutation at lysine 103 → asparagine and/or tyrosine 181 → cysteine in HIV reverse transcriptase, comprising administering to said host an effective anti-HIV treatment amount of a compound of claim 1, or its pharmaceutically acceptable salt thereof, in combination and/or alternation with one or more other anti-HIV agent, optionally in a pharmaceutically acceptable carrier or diluent.
29. The method of any one of claims 19-28 wherein the host is a human.